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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,687	10/17/2003	Dean Willberg	56.0758	2686

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EXAMINER

KUGEL, TIMOTHY J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,687

Applicant(s)

WILLBERG ET AL.

Examiner

Timothy J. Kugel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,6,8-10 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,6,8-10,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1,5,6,8-10 and 12-16 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1, 5, 6, 8-10 and 12-16 pending as amended on 30 June 2006, claims 2-4, 7 and 11 being cancelled. Claims 12-14 are withdrawn from consideration.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Specification

3. Applicant's amendment, filed 30 June 2006, with respect to removing the limitation "on the surface of a formation penetrated by a wellbore" has been fully considered and are corrective.

The objection to the specification under 37 CFR 1.75(d)(1) has been withdrawn.

Claim Rejections - 35 USC § 102 and 35 USC § 103

4. Claims 1, 5, 10 and 15 stand rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,986,354 (Cantu '354 hereinafter).

Cantu '354 teaches microencapsulated oil field chemical compositions made by placing an oil field chemical in microcapsules made from condensation products of hydroxyacetic acid alone or with compounds containing other hydroxy, carboxylic acid or hydroxycarboxylic acid moieties such as lactic acid (Column 1 Lines 37-47 and Column 2 Lines 8-15) wherein the condensation products are solids and insoluble in aqueous and hydrocarbon media (Column 1 Lines 50-65), further, a variety of oil field

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chemicals that fall in the class of solid acid reactive materials may be included in the capsules, and in particular, borate cross linkers (Column 2 Line 42 – Column 3 Line 7). The microcapsules may be placed in an oil-based fluid (Column 3 Lines 40-45); this fluid would effectively act as and/or form a hydrolysis-delaying coating for the capsules.

As to claim 15, the composition taught by Cantu is at least inherently capable of forming a filter cake on the surface of a formation penetrated by a wellbore.

5. Claims 6 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Cantu '354.

Cantu '354 teaches microencapsulated oil field chemical compositions made by placing an oil field chemical in microcapsules made from condensation products of hydroxyacetic acid alone or with compounds containing other hydroxy, carboxylic acid or hydroxycarboxylic acid moieties such as lactic acid wherein the condensation products are solids and insoluble in aqueous and hydrocarbon media, further, a variety of oil field chemicals that fall in the class of solid acid reactive materials may be included in the capsules, and in particular, borate cross linkers as detailed above.

Cantu '354 does not explicitly teach the use of boric acid or borax.

Cantu '354 does, however, teach the use of borate cross linkers in the same context as borax in claim 6.

As borax (sodium borate) is a very common variety of borate cross linker, the teaching of borate cross linkers by Cantu '354 would have made it obvious to one of ordinary skill in the art to employ borax as in claim 6.

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Regarding claim 16, Cantu '354 teaches the same composition as claimed in the same context as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the solid acid-reactive material of the Cantu '354 composition would intrinsically be as effective as claimed.

6. Claims 8 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cantu '354 in view of US Patent 5,325,921(Johnson hereinafter).

Cantu '354 teaches microencapsulated oil field chemical compositions made by placing an oil field chemical in microcapsules made from condensation products of hydroxyacetic acid alone or with compounds containing other hydroxy, carboxylic acid or hydroxycarboxylic acid moieties such as lactic acid wherein the condensation products are solids and insoluble in aqueous and hydrocarbon media, further, a variety of oil field chemicals that fall in the class of solid acid reactive materials may be included in the capsules, and in particular, borate cross linkers as detailed above.

Cantu '354 does not disclose expressly the use of any of the specific species called out in claim 9.

Johnson discloses that calcium carbonate and metal hydroxides may be used similar fluids (Column 4 Lines 64-66).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the calcium carbonate or metal hydroxides of Johnson in the composition of Cantu '354. The motivation to do so would have been to include a fluid loss agent in the composition (Johnson Column 4 Lines 64-66).

Response to Arguments

7. Applicant's arguments filed 30 June 2006 have been fully considered but they are not persuasive.

Applicant's argues that the added limitation to independent claim 1, requiring the solid acid-precursor and solid acid-reactive material to be separate particles, is not taught by Cantu '354 as Cantu '354 teaches the two materials in a single capsule; however, even if microencapsulated, Cantu '354 teaches the two materials as separate particles—or else they would react with one another prior to dissolution in the subterranean oil formation.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

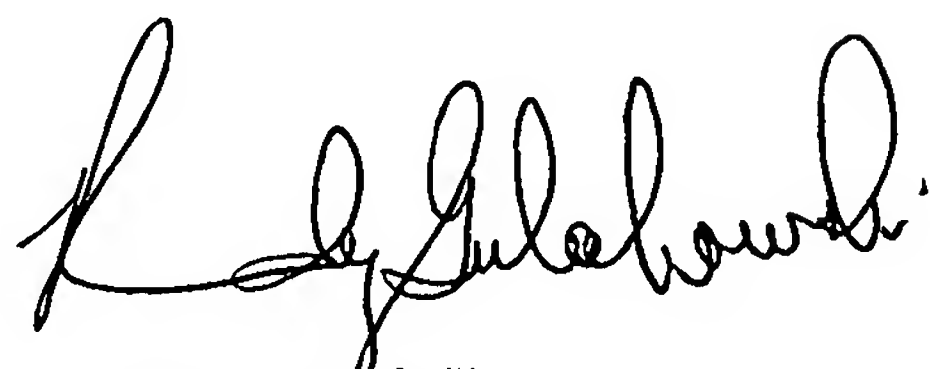
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached 6:00 AM – 4:30 PM Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJK
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